Appl. No.: Not Yet Assigned Atty. Docket No.: 54719.000051

[071] <u>CLAIMS</u>:

1. A composition comprising a triiodothyronine protected at a phenolic hydroxyl with a protecting group said protecting group selected from the group consisting of dialkylphosphinate, diarylphosphinate, alkylarylphosphinate, dialkylphosphate, acetyl, trialkylsilyl, and benzyloxy carbonyl.

- 2. The composition claim 1, wherein the dialkylphosphinate is selected from a C_1 to C_{18} substituted alkyl.
- 3. The composition claim 1, wherein the dialkylphosphinate is selected from a C_1 to C_{18} unsubstituted alkyl.
- 4. The composition of claim 1, wherein the dialkylphosphinate is dimethylphosphinate
- 5. The composition of claim 1, wherein the dialkylphosphinate is diethylphosphinate.
- 6. The composition of claim 1, wherein the diarylphosphinate is a substituted phenyl.
- 7. The composition of claim 1, wherein the diarylphosphinate is an unsubstituted phenyl.
- 8. The composition claim 1, wherein the dialkylphosphate is selected from a C_1 to C_{18} substituted or unsubstituted alkyl.
- 9. The composition of claim 1, wherein the dialkylphosphate is dimethylphosphate
- 10. The composition of claim 1, wherein the dialkylphosphate is diethylphosphate.
- 11. The composition of claim 1, wherein the diarylphosphate is a substituted phenyl.
- 12. The composition of claim 1, wherein the diarylphosphate is an unsubstituted phenyl.
- 13. The composition of claim 1, further comprising a pharmaceutically acceptable excipient.

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14. A method of treating a thyroid related condition comprising treating a patient in need thereof with the composition of claim 13.

- 15. The method of claim 14 wherein said condition is hypothyroidism or depression.
- 16. A method of stabilizing and increasing the shelf life of a thyroid hormone comprising the composition of claim 1.
- 17. A composition comprising a reverse triiodothyronine protected at a phenolic hydroxyl with a protecting group, said protecting group selected from the group consisting of dialkylphosphinate, diarylphosphinate, alkylarylphosphinate, dialkylphosphate, diarylphosphate, acetyl, and benzyloxy carbonyl.
- 18. The composition of claim 17, further comprising a pharmaceutically acceptable excipient.
- 19. A method of treating a thyroid related condition comprising treating a patient in need thereof with the composition of claim 18.
- 20. The method of claim 19 wherein said condition is hypothyroidism or depression.
- 21. A method of stabilizing and increasing the shelf life of a thyroid hormone comprising the composition of claim 17.
- 22. A composition comprising a 3,5 diiodothyronine protected at a phenolic hydroxyl with a protecting group, said protecting group selected from dialkylphosphinate, diarylphosphinate, alkylarylphosphinate, dialkylphosphate, diarylphosphate, acetyl, and benzyloxy carbonyl
- 23. The composition of claim 22 wherein the 3,5 diiodothyronine is selected from 3,5 diiodothyronine, 3',5' diiodothyronine, and 3,3' diiodothyronine.

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24. The composition of claim 23, further comprising a pharmaceutically acceptable excipient.

- 25. A method of treating a thyroid related condition comprising treating a patient in need thereof with the composition of claim 24.
- 26. The method of claim 25 wherein said condition is hypothyroidism or depression.
- 27. A method of stabilizing and increasing the shelf life of a thyroid hormone comprising the composition of claim 22.
- 28. A composition comprising a 3-monoiodothyronine protected at a phenolic hydroxyl with a protecting group selected dialkylphosphinate, diarylphosphinate, alkylarylphosphinate, dialkylphosphate, diarylphosphate, acetyl, and benzyloxy carbonyl.
- 29. The composition of claim 28, further comprising a pharmaceutically acceptable excipient.
- 30. A method of treating a thyroid related condition comprising treating a patient in need thereof with the composition of claim 29.
- 31. The method of claim 30 wherein said condition is hypothyroidism or depression.
- 32. A method of stabilizing and increasing the shelf life of a thyroid hormone comprising the composition of claim 28.
- 33. A composition comprising a thyroxine protected at the phenolic hydroxyl with a protecting group selected from diarylphosphinate, alkylarylphosphinate, diarylphosphate, acetyl, and benzyloxy carbonyl.
- 34. The composition of claim 33, further comprising a pharmaceutically acceptable excipient.

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- 35. A method of treating a thyroid related condition comprising treating a patient in need thereof with the composition of claim 34.
- 36. The method of claim 35 wherein said condition is hypothyroidism or depression.
- 37. A method of stabilizing and increasing the shelf life of a thyroid hormone comprising the composition of claim 33.
- 38. The pharmaceutical composition of claim 13, 18, 24, 29, or 34 wherein said composition is in the form of an ingestible tablet.
- 39. The pharmaceutical composition of claim 13, 18, 24, 29, or 34 wherein said composition is in the form of an intravenous preparation.
- 40. The pharmaceutical composition of claim 13, 18, 24, 29, or 34 wherein said composition is in the form of an oral dosage.